

Claims

- [c1] 1.A fuel cell interconnect comprising a gas barrier plate which is impervious to gas and at least one porous metal layer.
- [c2] 2.The interconnect of claim 1 comprising a central gas barrier plate disposed between a first and second porous metal layer.
- [c3] 3.The interconnect of claim 1 wherein the gas barrier plate is corrugated.
- [c4] 4.The interconnect of claim 3 comprising a single porous metal layer.
- [c5] 5.The interconnect of claim 1 wherein the gas barrier plate comprises a material selected from the group consisting of stainless steel, Hastaloy alloys and Inconel alloys.
- [c6] 6.The interconnect of claim 1 wherein the first outer metal foam layer comprises a nickel foam bonded to the gas separator layer.
- [c7] 7.The interconnect of claim 4 wherein the second outer porous metal layer comprises a foam comprising Haynes

H230.

- [c8] 8.The interconnect of claim 1 wherein the porous metal layers are bonded to the gas barrier plate in an electrically conductive manner.
- [c9] 9.The interconnect of claim 6 wherein the porous metal layers are bonded to the gas barrier plate by welding or brazing.
- [c10] 10.The interconnect of claim 1 wherein the at least one porous metal layer comprises a metal foam formed by slurry foaming.